

What is claimed is:

1. A device for feeding particulate material, comprising:
a conveyor belt that conveys the material in a forward longitudinal direction;
- 5 a material inlet located above at least a first portion of the conveyor belt; and
a movable plate located above at least a second portion of the conveyor belt, that provides a force on the particulate material.
- 10 2. A device according to claim 1, wherein the plate is mounted for pivotal movement.
3. A device according to claim 1, further comprising a hinge that supports the plate for pivotal movement.
- 15 4. A device according to claim 1, further comprising a power actuator that moves the plate.
5. A device according to claim 4, wherein the power actuator is an air cylinder.
- 20 6. A device according to claim 4, further comprising a controller that controls the force applied by the plate.

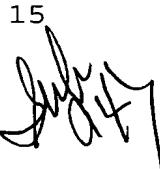
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7. A device according to claim 1, further comprising a controller that controls the position of the plate.

8. A device according to claim 1, wherein the plate is mounted for 5 movement to a first position at which the plate substantially prevents movement of coal in the longitudinal direction.

9. A device according to claim 1, further comprising a pair of side 10 skirts extending substantially along at least a portion of the length of the conveyor.

10. A device according to claim 9, further comprising a rear end skirt that extends across the width of the belt located in a rearward direction from the material inlet.

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and
11. A device for feeding particulate material, comprising:
means for conveying the material in a first longitudinal direction;
means for urging a movable plate against the material to apply a
20 force against the material in a direction other than the first longitudinal direction.

12. A device according to claim 11, further comprising means for supporting the plate for pivotal movement.

25 13. A device according to claim 11, further comprising a power

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actuating means for moving the plate.

14. A device according to claim 13, further comprising means for controlling the force applied by the plate.

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15. A device according to claim 13, further comprising means for controlling the position of the plate.

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16. A method for feeding particulate material, comprising:
conveying the material in a first longitudinal direction; and
urging a movable plate against the material to apply a force
against the material in a direction other than the first longitudinal direction.

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17. A method according to claim 16, further comprising the step of
supporting the plate for pivotal movement.

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18. A method according to claim 16, further comprising the step of
moving the plate by a power actuator.

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A method according to claim 16, further comprising the step of
controlling the force applied by the plate.

20. A method according to claim 16, further comprising the step of
controlling the position of the plate.